

REMARKS

This is a full and timely response to the outstanding Office Action mailed August 3, 2004. Upon entry of the amendments in this response claims 1-22 are pending. More specifically, claims 1, 8, and 12 are amended. These amendments are specifically described hereinafter. It is believed that the foregoing amendments add no new matter to the present application.

I. Present Status of Patent Application

Claims 1, 2, 8-13, 15, and 16 are rejected under 35 U.S.C. §112 first paragraph, as allegedly failing to comply with the written description requirements. Claims 1, 2, 8-13, 15, and 16 are rejected under 35 U.S.C. §112 second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 2, 8-13, 15, and 16 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Cole (US Patent No. 6, 535,550 previously cited) in view of Terry (US Patent No. 6,339,613).

II. Miscellaneous Issues

A. Response To Claim Rejections Under 35 U.S.C. §112, First Paragraph

Claims 1, 2, 8-13, 15, and 16 are rejected under 35 U.S.C. §112 first paragraph, a failing to comply with the written description requirements. The Office Action maintains that there is no support for *selectively configuring at least one system parameter in response to measured system conditions* in the originally filed written description. Applicant respectfully transverses.

Applicant refers to page 12, line 4 through 7 of the originally filed written description which states: "For example, the system parameters may comprise *B & G* tables (containing bins or tones used and a corresponding power for each), forward error correction parameters *R & S*, an interleaver depth, *D*, and other distinctive parameters that may be configured in response to measured conditions on the twisted-pair telephone line 48.

As there clearly is support for the cited claim language, Applicant respectfully requests that the rejections under 35 U.S.C. §112 first paragraph be withdrawn.

B. Response To Claim Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 1, 2, 8-13, 15, and 16 are rejected under 35 U.S.C. §112 second paragraph as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has amended independent claims 1, 8, and 12 to delineate the two instances of “at least one system parameter” as “at least a first system parameter” and “at least a second system parameter.” As the amended claims now point out and distinctively claim the subject matter of the invention, Applicant respectfully requests that the rejections under 35 U.S.C. §112 second paragraph be withdrawn.

Applicants wish to clarify that the foregoing amendments have been made for purposes of better defining the invention in response to the rejections made under 35 U.S.C. § 112, and not in response to the rejections made based on prior art. Indeed, Applicants submit that no substantive limitations have been added to the claims to overcome the rejections. Therefore, no prosecution history estoppel arises from these particular amendments. Black & Decker, Inc. v. Hoover Service Center, 886 F.2d 1285, 1294 n. 13 (Fed. Cir. 1989); Andrew Corp. v. Gabriel Electronics, Inc., 847 F.2d 819 (Fed. Cir. 1988); Hi-Life Products Inc. v. American National Water-Mattress Corp., 842 F.2d 323, 325 (Fed. Cir. 1988); Mannesmann Demag Corp. v. Engineered Metal Products Co., Inc., 793 F.2d 1279, 1284-1285 (Fed. Cir. 1986); Moeller v. Ionetics, Inc., 794 F.2d 653 (Fed. Cir. 1986).

III. Rejections Under 35 U.S.C. §103(a)

A. Claims 1 and 2

The Office Action rejects claims 1 and 2 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Cole* (U.S. Patent No. 6,535,550) in view of *Terry* (U.S. Patent No. 6,339,613). For the reasons set forth below, Applicant respectfully traverses the rejection.

Independent 1 as amended recites:

1. A first digital subscriber line (DSL) modem communicatively coupled with a second DSL modem, the first DSL modem comprising:
 - a digital signal processor configured:
 - to selectively configure at least a first system parameter in response to an identification of a manufacturer of the second DSL modem; and
 - to selectively configure at least a second system parameter in response to measured system conditions; and
 - a memory device communicatively coupled to the digital signal processor configured to store the at least first and second system parameters, wherein the first and second system parameters are pre-configured to optimize data communications between the first and second DSL modems and **wherein the second system parameter is an interleaver depth.**

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical.*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). Applicant respectfully submits that independent claim 1 is allowable for at least the reason that *Cole* and *Terry* do not disclose, teach, or suggest at least **wherein the second system parameter is an interleaver depth**. *Terry* discloses configuring the power spectral density based on a measured power spectral density. However, it doesn't disclose configuring an interleaver depth, nor is it obvious to modify the system disclosed in *Terry* to include configuring the interleaver depth.

As shown above, the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 1. Notwithstanding, no such teaching can be identified anywhere within these references. Therefore, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 1 is allowable.

Because independent claim 1 is allowable over the prior art of record, dependent claim 2 (which depends from independent claim 1) is allowable as a matter of law for at least the reason that dependent claim 2 contains all the steps/features of independent claim 1. *See Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002)

Jeneric/Pentron, Inc. v. Dillon Co., 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000);
Wahpeton Canvas Co. v. Frontier Inc., 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989).

Therefore, the rejection to claim 2 should be withdrawn and the claim allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 1, dependent claim 2 recites further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the prior art of record. Hence there are other reasons why dependent claim 2 is allowable.

B. Claims 8-11

The Office Action rejects claims 8-11 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Cole* (U.S. Patent No. 6,535,550) in view of *Terry* (U.S. Patent No. 6,339,613). For the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 8 as amended recites:

8. A digital subscriber line (DSL) communication system, comprising:
a first modem configured to:
 appropriately apply at least a first system parameter pre-
 configured to optimize data communications with DSL modems
 originating from a specific manufacturer;
 appropriately apply at least a second system parameter in
 response to measured system conditions; and
 a two-wire pair telephone line communicatively coupled to the
 first modem; and
a second modem communicatively coupled to the two-wire pair telephone line;
wherein the second system parameter is an interleaver depth.

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical.*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). Applicant respectfully submits that independent claim 8 is allowable for at least the reason that *Cole* and *Terry* do not disclose, teach, or suggest at least **wherein the second system parameter is an interleaver depth**. *Terry* discloses configuring the power

spectral density based on a measured power spectral density. However, it doesn't disclose configuring an interleaver depth, nor is it obvious to modify the system disclosed in *Terry* to include configuring the interleaver depth.

As shown above, the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 8. Notwithstanding, no such teaching can be identified anywhere within these references. Therefore, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 8 is allowable.

Because independent claim 8 is allowable over the prior art of record, dependent claims 9-11 (which depend from independent claim 8) are allowable as a matter of law for at least the reason that dependent claims 9-11 contain all the steps/features of independent claim 8. *See Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002) *Jeneric/Pentron, Inc. v. Dillon Co.*, 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); *Wahpeton Canvas Co. v. Frontier Inc.*, 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, the rejection to claims 9-11 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 8, dependent claims 9-11 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the prior art of record. Hence there are other reasons why dependent claims 9-11 are allowable.

C. Claims 12, 13, 15, and 16

The Office Action rejects claims 12, 13, 15, and 16 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Cole* (U.S. Patent No. 6,535,550) in view of *Terry* (U.S. Patent No. 6,339,613). For the reasons set forth below, Applicant respectfully traverses the rejection.

Independent 12 as amended recites:

12. A digital subscriber line (DSL) modem, comprising:
means for applying a default variable identifying the manufacturer of a communicatively coupled remote DSL modem;
means for selectively applying at least a first system parameter in response to measured system conditions; and
means for selectively applying at least a second system parameter during initial DSL system training in response to the identified manufacturer of the remote modem;
wherein the second system parameter is an interleaver depth.

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical.*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). Applicant respectfully submits that independent claim 12 is allowable for at least the reason that *Cole* and *Terry* do not disclose, teach, or suggest at least **wherein the second system parameter is an interleaver depth**. *Terry* discloses configuring the power spectral density based on a measured power spectral density. However, it doesn't disclose configuring an interleaver depth, nor is it obvious to modify the system disclosed in *Terry* to include configuring the interleaver depth.

As shown above, the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 12. Notwithstanding, no such teaching can be identified anywhere within these references. Therefore, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 12 is allowable.

Because independent claim 12 is allowable over the prior art of record, dependent claims 13, 15, and 16 (which depend from independent claim 12) are allowable as a matter of law for at

least the reason that dependent claims 13, 15, and 16 contain all the steps/features of independent claim 12. *See Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002) *Jeneric/Pentron, Inc. v. Dillon Co.*, 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); *Wahpeton Canvas Co. v. Frontier Inc.*, 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, the rejection to claims 13, 15, and 16 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 12, dependent claims 13, 15, and 16 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the prior art of record. Hence there are other reasons why dependent claims 13, 15, and 16 are allowable.

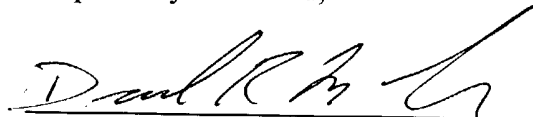
IV. Cited Art Made of Record

The cited references made of record have been considered, but are not believed to affect the patentability of the presently pending claims. Other statements not explicitly addressed herein are not admitted.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-22 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,



Daniel R. McClure, Reg. No. 38,962

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

Suite 1750

100 Galleria Parkway N.W.

Atlanta, Georgia 30339

(770) 933-9500